

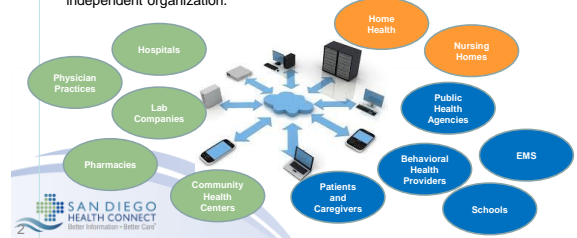
EMS and HIE in San Diego County EMSA HIE Summit November 19 -20, 2013

Dan Chavez
Executive Director



San Diego Health Connect

- Funded by ARRA HITECH Act as a Beacon Community.
- \$15 million over three years to use IT to improve health care delivery in San Diego, as model for nation.
- Transitioned from University grant-funded project to self-sustaining independent organization.



San Diego

- 3.2 million people
 - Second most populous County in the state, 5th most populous county in the U.S.
 - Has a larger population than 20 of the 50 States
- 4,526 square miles
- 70 miles of coastline
- Geographic diversity: Coast, mountain, desert
- 86 miles of international border - Busiest land-border crossing in the world
- 3 Military Facilities
- 18 federally recognized Indian Reservations
- 19 Acute Care Hospitals
- 4 Non-acute/Rehab Hospitals
- 115 clinics
- 9,000 physicians



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Service Lines

- Services will add value for providers and patients
- Care coordination focus
- Right time, right place
- Provide a path to financial stability
- Patient records linked



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Suite of Services

- Clinical Cloud
 - Community Clinical Exchange
 - Health-e-way Exchange
 - Direct Exchange
 - Radiology Imaging
 - Import Medical Device Data
 - Alert Notifications



Suite of Services

- Pre-hospital Cloud - where data is available to electronically
 - Pre-hospital Record, ECG, & Images
 - Search Capability into the HIE
 - Case Management
 - 911 Analytics
- Health Reporting
 - Immunization, Electronic Lab Reporting
 - Syndromic Surveillance
 - Alert Notifications



2013 On-Boarding Status

- On Board
 - UCSD, VA, Kaiser, Rady
 - Clinics – Mountain, Neighborhood, SDFC, Vista, Imperial Beach, Borrego, San Ysidro
- Testing
 - Scripps, Sharp, DoD
 - Clinics – Planned Parenthood, Clinicas, North County, St. Vincent de Paul, La Maestra, Indian Health Council, FHCS



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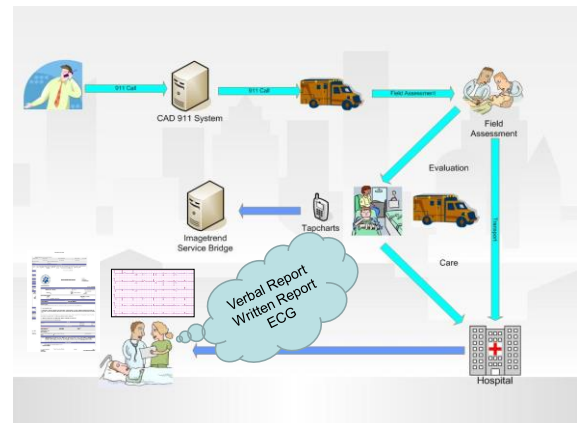
EMS Hub History

- Initiated in 2010 as a joint project between UCSD School of Emergency Medicine and City of San Diego EMS
- Proposed in Beacon grant proposal to expand functionality
- Beacon grant expanded functionality and utilization
- UCSD gifted license to San Diego Health Connect



EMS Hub

- Intelligent/timely routing of EMS information to appropriate destination facility
 - Controlled access to EMS data in EMS Hub
 - Targeted push into destination system (e.g. referrals)
- Current Status
 - SSO from facilities and HIE SSO portal
 - Data directly from and to data sources
 - EMS patients not linked to HIE MPI



Pre-hospital HIE

- Pre-hospital data available to hospitals electronically
 - Pre-hospital record
 - Electrocardiograms
- EMS Agency/Vendor Partners
 - SD City EMS
 - AMR
 - Fieldsaver



EMS Hub Jurisdictions

- San Diego
- Carlsbad
- Vista
- Escondido
- El Cajon
- Poway
- Oceanside
- Coronado
- Julian
- Cuyamaca
- San Marcos
- Santee
- Lakeside

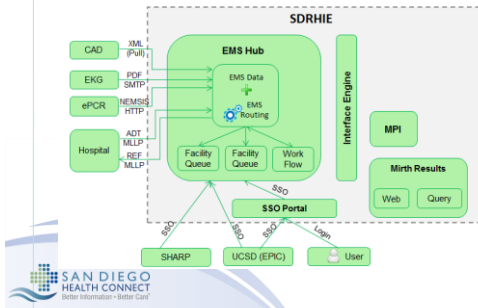
Hospitals On Board

- Rady
- Sharp
- UCSD



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EMS Hub - Current

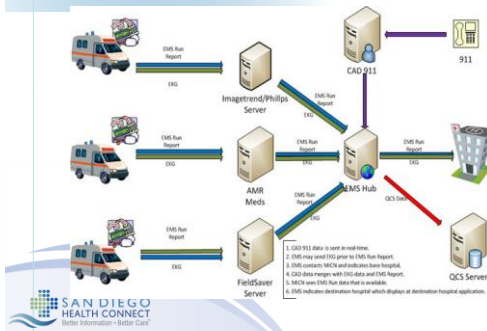


Recent Enhancements

- Enhancements Implemented
 - QCS Integration – integration of first responder reporting to County of San Diego
 - Additional functionality
 - Runs matched
 - EKGs matched
 - CAD data created runs
 - Additional incidents to the Hub

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EMS Hub

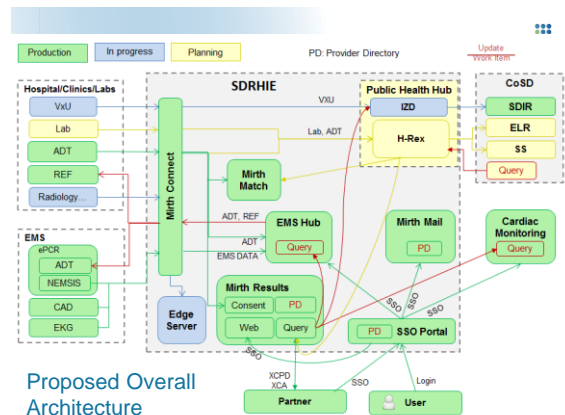
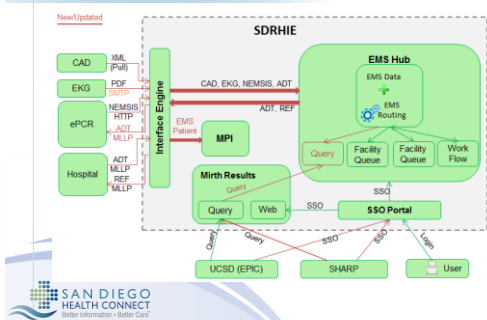


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EMS Hub – Current Planned Work

- All SSO through the SSO portal
- Data into and out from the EMS Hub through the HIE interface engine
- Tighter integration with HIE (patient identity data to update HIE MPI, access to Virtual Record from EMS Hub, and respond to HIE query)

EMS Hub - Updated



Proposed Overall Architecture

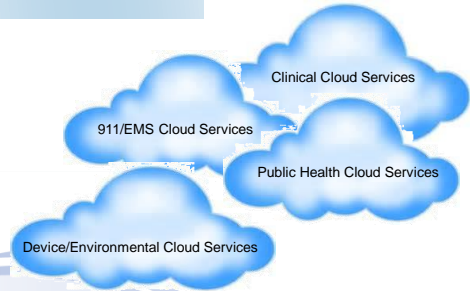
Future Plans

- EMS Hub workgroup – beginning January 2014
- Future functionality
 - Product Management
 - Street Sense and On Scene integration
 - HIE integration
 - BLS Module
 - Additional pre-hospital medical device interfaces
 - Public health reporting integration

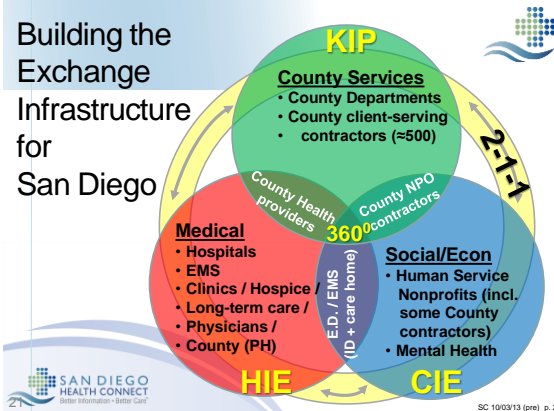


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San Diego Health Connect Architecture

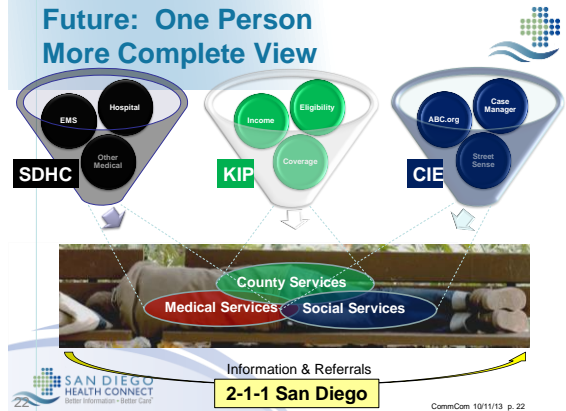


Building the Exchange Infrastructure for San Diego



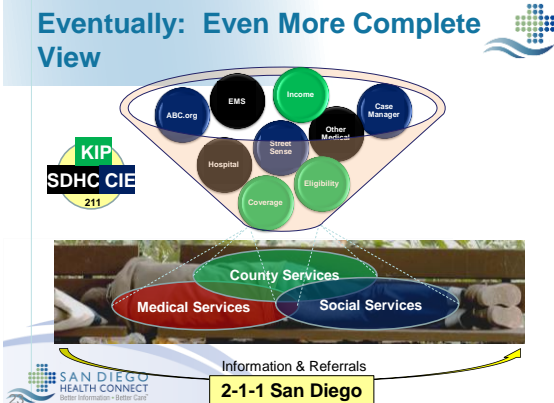
SC 10/03/13 (pre) p. 21

Future: One Person More Complete View



CommCom 10/11/13 p. 22

Eventually: Even More Complete View



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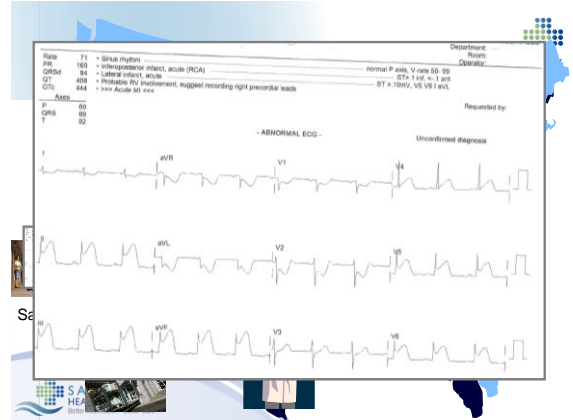
Why We are Optimistic

- The conversation has started
- We have the relationships
- The technology is possible
- We already see improvements
- Agreement this is a marathon not a sprint
- We are committed



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Questions?



EMS HUB UCSD BASE STATION QUEUE

View Queue [Click here to view](#)

Welcome charts_user (Log Out)

#	CAD Incident ID	Unit	Agency	Unit	Request Time	Age	Sex	Chief Complaint	Disposition	Ref/Location
1	1105013 04 14	SCMSE	M20		11/25/13 04:14	23	F	Unresponsive	Problem	San Diego General Hospital San Diego ED
2	1105013 03 09	SCMSE	M20		11/25/13 03:09	23	F	Unresponsive	Problem	San Diego General Hospital San Diego ED
3	1105013 03 47	SCMSE	M20		11/25/13 03:47	23	F	Unresponsive	Problem	San Diego General Hospital San Diego ED
4	1105013 02 43	SCMSE	M20		11/25/13 02:43	23	F	Unresponsive	Problem	San Diego General Hospital San Diego ED
5	1105013 19 00	SCMSE	M20		11/25/13 19:00	23	F	Unresponsive	Problem	San Diego General Hospital San Diego ED
6	1105013 20 21	SCMSE	M20		11/25/13 20:21	23	F	Unresponsive	Problem	San Diego General Hospital San Diego ED
7	1105013 20 21	SCMSE	M20		11/25/13 20:21	23	F	Unresponsive	Problem	San Diego General Hospital San Diego ED
8	1105013 17 44	SCMSE	M20		11/25/13 17:44	23	F	Unresponsive	Problem	San Diego General Hospital San Diego ED
9	1105013 16 58	SCMSE	M20		11/25/13 16:58	23	F	Unresponsive	Problem	San Diego General Hospital San Diego ED
10	1105013 16 23	SCMSE	M20		11/25/13 16:23	23	F	Unresponsive	Problem	San Diego General Hospital San Diego ED
11	1105013 14 59	SCMSE	M20		11/25/13 14:59	23	F	Unresponsive	Problem	San Diego General Hospital San Diego ED
12	1105013 13 53	SCMSE	M20		11/25/13 13:53	23	F	Unresponsive	Problem	San Diego General Hospital San Diego ED
13	1105013 13 43	SCMSE	M20		11/25/13 13:43	23	F	Unresponsive	Problem	San Diego General Hospital San Diego ED
14	1105013 13 21	SCMSE	M20		11/25/13 13:21	23	F	Unresponsive	Problem	San Diego General Hospital San Diego ED
15	1105013 13 47	SCMSE	M20		11/25/13 13:47	23	F	Unresponsive	Problem	San Diego General Hospital San Diego ED
16	1105013 13 47	SCMSE	M20		11/25/13 13:47	23	F	Unresponsive	Problem	San Diego General Hospital San Diego ED
17	1105013 13 47	SCMSE	M20		11/25/13 13:47	23	F	Unresponsive	Problem	San Diego General Hospital San Diego ED

EMS HUB CAD DETAIL

CAD Incident Number: F512123854
 Agency: San Diego
 Dispatch Time: 11/25/13 10:30
 Problem: Sick Person (Specific Dx)(L1)
 Disposition: I-CALL COMPLETE

UPLOADS
 No uploaded files found.

IMAGES
 No images were submitted.

Signature field(s) detected. Open Sign Panel

Incident ID	Incident Number	Incident Type	Station No
2701100	F512123854	Problem	2701100

EMS HUB EMS RUN DETAIL

Accident: M20
 M20 Notes: Arrival Board Comments: Location:

Left Scene Time: 11/25/13 05:04
 Agency: SCMSE
 Unit: M20
 Patient Name:
 Age: 24
 Sex: M
 Chief Complaint: Respiratory Distress
 Acuity: M20
 Flags:

Unconscious
 Description:
 No uploaded files found.

VITALS

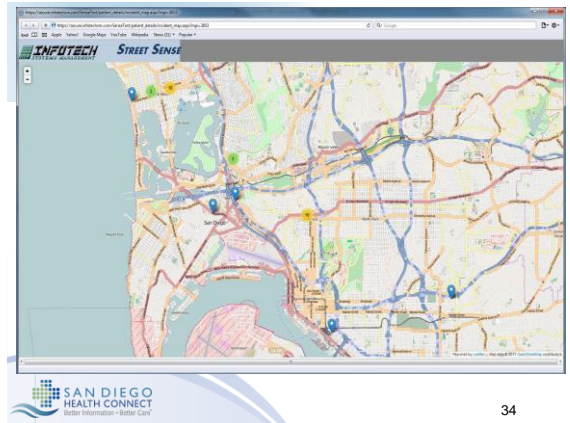
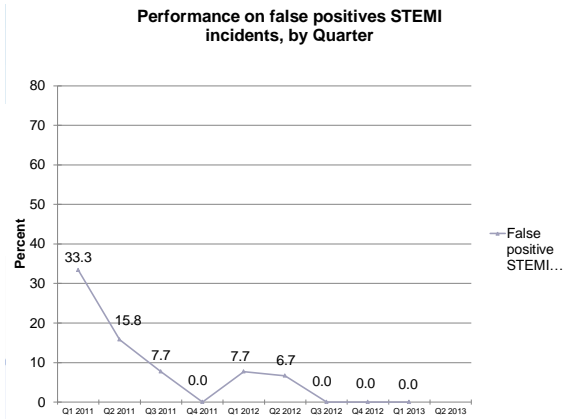
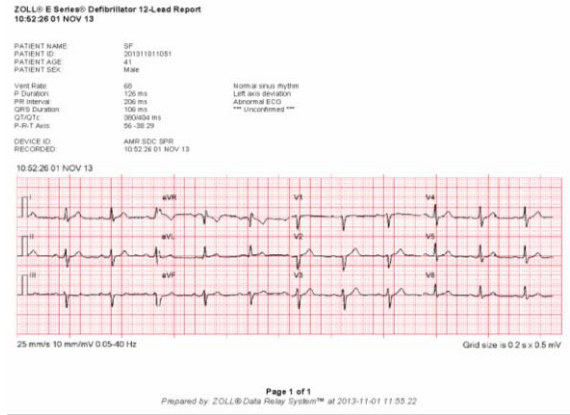
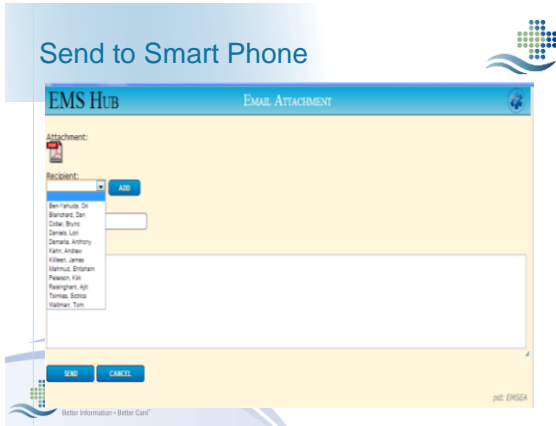
State	Prior to Run's Start	Cardiac Rhythm	Respiratory Rate	Respiratory Volume	Method of BP Measurement	Pulse Rate	SpO2 Sat	Pulse Oximetry
11/25/13 11:15	Normal	120/80	20	100%	120	98	100%	
11/25/13 11:16	Normal	120/80	20	100%	120	98	100%	
11/25/13 11:17	Normal	120/80	20	100%	120	98	100%	
11/25/13 11:18	Normal	120/80	20	100%	120	98	100%	
11/25/13 11:19	Normal	120/80	20	100%	120	98	100%	
11/25/13 11:20	Normal	120/80	20	100%	120	98	100%	
11/25/13 11:21	Normal	120/80	20	100%	120	98	100%	
11/25/13 11:22	Normal	120/80	20	100%	120	98	100%	
11/25/13 11:23	Normal	120/80	20	100%	120	98	100%	
11/25/13 11:24	Normal	120/80	20	100%	120	98	100%	
11/25/13 11:25	Normal	120/80	20	100%	120	98	100%	
11/25/13 11:26	Normal	120/80	20	100%	120	98	100%	
11/25/13 11:27	Normal	120/80	20	100%	120	98	100%	
11/25/13 11:28	Normal	120/80	20	100%	120	98	100%	
11/25/13 11:29	Normal	120/80	20	100%	120	98	100%	
11/25/13 11:30	Normal	120/80	20	100%	120	98	100%	
11/25/13 11:31	Normal	120/80	20	100%	120	98	100%	
11/25/13 11:32	Normal	120/80	20	100%	120	98	100%	
11/25/13 11:33	Normal	120/80	20	100%	120	98	100%	
11/25/13 11:34	Normal	120/80	20	100%	120	98	100%	
11/25/13 11:35	Normal	120/80	20	100%	120	98	100%	
11/25/13 11:36	Normal	120/80	20	100%	120	98	100%	
11/25/13 11:37	Normal	120/80	20	100%	120	98	100%	
11/25/13 11:38	Normal	120/80	20	100%	120	98	100%	
11/25/13 11:39	Normal	120/80	20	100%	120	98	100%	
11/25/13 11:40	Normal	120/80	20	100%	120	98	100%	
11/25/13 11:41	Normal	120/80	20	100%	120	98	100%	
11/25/13 11:42	Normal	120/80	20	100%	120	98	100%	
11/25/13 11:43	Normal	120/80	20	100%	120	98	100%	
11/25/13 11:44	Normal	120/80	20	100%	120	98	100%	
11/25/13 11:45	Normal	120/80	20	100%	120	98	100%	
11/25/13 11:46	Normal	120/80	20	100%	120	98	100%	
11/25/13 11:47	Normal	120/80	20	100%	120	98	100%	
11/25/13 11:48	Normal	120/80	20	100%	120	98	100%	
11/25/13 11:49	Normal	120/80	20	100%	120	98	100%	
11/25/13 11:50	Normal	120/80	20	100%	120	98	100%	
11/25/13 11:51	Normal	120/80	20	100%	120	98	100%	
11/25/13 11:52	Normal	120/80	20	100%	120	98	100%	
11/25/13 11:53	Normal	120/80	20	100%	120	98	100%	
11/25/13 11:54	Normal	120/80	20	100%	120	98	100%	
11/25/13 11:55	Normal	120/80	20	100%	120	98	100%	
11/25/13 11:56	Normal	120/80	20	100%	120	98	100%	
11/25/13 11:57	Normal	120/80	20	100%	120	98	100%	
11/25/13 11:58	Normal	120/80	20	100%	120	98	100%	
11/25/13 11:59	Normal	120/80	20	100%	120	98	100%	
11/25/13 12:00	Normal	120/80	20	100%	120	98	100%	

EMS Comprehensive Report

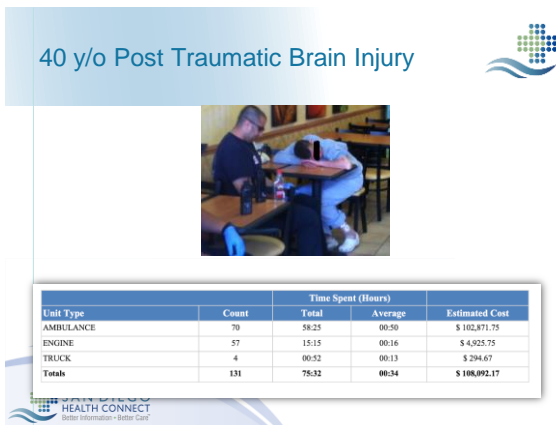
Incident or Onset: 11/25/13 05:00 Unit Arrived On Scene: 11/25/13 05:05 Patient arrived at Destination: 11/25/13 05:34
 PSAP Call: 11/25/13 04:27 Arrived at Patient: 11/25/13 05:05 Unit back in service: 11/25/13 05:34
 Dispatch notified: 11/25/13 04:27 Transfer of Patient Care: 11/25/13 05:34 Unit back in service: 11/25/13 05:34
 Unit notified by Dispatch: 11/25/13 04:28 Unit Left Scene: 11/25/13 05:04 Unit back at Home Location: 11/25/13 05:04
 Unit En Route: 11/25/13 04:28

Other EMS Agencies at Scene:
 Other Services at Scene:
 Estimated Initial Responder on Scene:
 Initial Responder on Scene DataTime:
 Number of Patients at Scene:
 Main Casualty Incident:

Incident Location Type: Home/Residence
 Incident Facility Code: San Diego
 Scene Zone Number: 1801 Franklin St
 Incident Address: San Diego, CA 92110



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Frequent Freddie



- 354 visits in 2010
- Visited 45 facilities in LA county
- Self-pay/indigent payer status
- Non-Hispanic White Male
- Age 29
- Admitted/transferred for continued care <8% of visits
- 40% of visits with a primary psych diagnosis (290-302, 306-316)
- 5% of visits with a drug/alcohol diagnoses (303-305)
- 38% of visits for a prescription refill encounter (V681)



Frequent Frannie



- 429 visits in 2010
- Visited 40 facilities across 8 counties
- Medi-Cal payer status
- Non-Hispanic Black Female
- Age 57
- Admitted/transferred for continued care <4% of visits
- 20% of visits pain-related (i.e. pain, migraine, abdominal, head/neck, or back symptoms)
- 38% of visits for a cellulitis and abscess (682)

